

for the overlay alternative. OCC suggests that the Department scrutinize this survey for objectivity and statistical relevance, and accord it the weight it deserves.

OCC also argues that in the context of a 10-minute telephone poll interview, many consumers react to a range of alternatives by merely choosing the one that they are most familiar without fully studying the ramifications of each solution. According to OCC, it is very difficult to believe that the average consumer is able to digest the definition of geographic split versus area overlay in the context of a telephone poll to the extent necessary to determine technical questions concerning the implementation of these complex technologies. OCC states that by its nature, any poll is a popularity contest between the familiar and the unfamiliar, and the survey offered during this proceeding played on this fact. OCC also states that if one were to rely solely on the criterion of "familiarity" alone, then even long-term number portability would probably be rejected because it is not familiar to consumers and the technology itself in fact remains experimental and untested in the United States, as well as being the focus of much industry debate. OCC claims that like the alternatives for the implementation of a new NPA, number portability is technical as well as being difficult and confusing to explain to consumers in a telephone call. OCC suggests that it is not surprising that the survey sponsors opted not to solicit consumer support for their own alternative to the NPA-exhaust problem, (i.e., number pooling). OCC notes that as was demonstrated in the hearings, nearly 50% of consumers surveyed in Docket No. 94-11-21 voted for a service specific or area overlay (with the remainder voting for the geographic split), so one could expect that a properly conducted survey would yield similar results or favor an area overlay. OCC October 28, 1997 Brief, pp. 2-8.

OCC also argues that the survey misled consumers regarding 10- and 11-digit dialing. While acknowledging that 10-digit dialing is a change from the current dialing pattern in light of the shrinking of local areas allowing for 7-digit dialing, the confusion inherent in distinguishing between what is local and what is a toll call, OCC claims that 10-digit dialing will reduce complexity and consumer frustration. OCC states that the pollster and survey sponsors, attempted to portray 10- and 11- digit dialing as a complex and mystifying change for consumers. According to OCC, the survey asked a leading question in this regard while making no similar reference to a different dialing pattern that would be required with the implementation of a geographic split. OCC contends that the opposite is stated by references to the idea that 7-digit dialing will be preserved with a geographic split is reinforced throughout the survey in spite of the evidence present in the record to the contrary. OCC concludes that that the survey itself was overtly slanted with this misconception. OCC also concludes that by moving to 10-digit dialing now, consumers will not be faced with three types of dialing patterns for three types of calls, a clear saving of anxiety. According to OCC, local calls will be dialed with 10-digits, and toll calls with 11-digits, with no questioning or guessing needed to determine just how local is local. OCC October 28, 1997 Brief, pp. 8-11.

**B. AT&T COMMUNICATIONS OF NEW ENGLAND/COX CONNECTICUT TELCOM, LLC  
(AT&T/Cox)**

AT&T/Cox recommend that the Department adhere to several key principles in evaluating issues regarding potential area code relief in Connecticut. In particular, AT&T/Cox first recommend that the Department minimize customer confusion and inconvenience. Secondly, AT&T/Cox recommend that the Department maintain community identity. AT&T/Cox state that if and when the Department decides to order area code relief, it must select a plan that is competitively neutral in that it does not unduly favor particular services or service providers and does not unduly disfavor new market entrants and their customers. According to AT&T/Cox, in applying these principles the Department must decide what makes sense for Connecticut at this time, and not make any decision about hypothetical future area code relief needs. AT&T/Cox May 22, 1997 Comments, pp. 1 and 2.

Additionally, AT&T/Cox argue that SNET's NXX consumption forecasts do not demonstrate impending exhaust. According to AT&T/Cox, the larger than normal quantities of NXXs requested for the 203 and 860 area codes in April, 1997 are the result of the request of one CLEC for a number of NXXs needed to compete on a statewide basis. AT&T/Cox contend that such "spikes" are not uncommon at the outset of competitive entry, especially in the case of a CLEC seeking to serve a large territory such as an entire state. AT&T/Cox also contend however, that this one-time surge in NXX demand does not in and of itself indicate an escalation in NXX demand to the point of becoming a "trend." AT&T/Cox claim that only some of the largest competitors will initially seek to serve such a large territory and that once a CLEC has received a large number of NXXs, it will not need additional numbers for some time.

AT&T/Cox also claim that SNET's 860 NPA NXX forecast exhaust appears to be erroneous. Given that the 860 area code was only implemented in 1995, it is reasonable to assume that a total of 199 NXXs have been assigned to date out of approximately 792 NXXs available in that (or any) NPA. AT&T/Cox conclude that even if SNET's 860 NXX consumption rate forecast of 144 NXXs per year is reasonable, then the 860 area code will not exhaust until mid-2001 and not the February 1999 as indicated by SNET. AT&T/Cox further argue that based on the data presented by SNET, it cannot be determined how many 203 NXXs have been assigned, and how many NXXs remain available. Therefore, AT&T/Cox conclude that prior to making any determination as to how to resolve the NXX exhaust, the necessary data must be available for analysis.

Moreover, AT&T/Cox maintain that SNET's 18-month estimate to implement the new area code is exaggerated particularly in situations where previous geographic splits have occurred. AT&T/Cox also maintain that the length of time for technical implementation of the relief alternative and for permissive dialing is no more than one year in the industry guidelines. According to AT&T/Cox, coupled with its erroneous and unverified forecasted NPA exhaust dates, SNET makes it appear that the Department must act quickly to make a determination. AT&T/Cox contends that the Department

need not order area code relief at this time in the absence of substantiated evidence. AT&T/Cox May 22, 1997 Comments, pp. 4 and 5.

Additionally, AT&T/Cox assert that number porting techniques should be deployed to make efficient use of unused telephone numbers in the existing NPAs.<sup>5</sup> According to AT&T/Cox, the more efficient use of existing numbers should delay any NPA exhaust issue until well into the next century. AT&T/Cox state that deployment of number porting technology on a competitively neutral basis would avoid the need for any of the consumer disruption that will accompany implementation of new area codes, whether a geographic split or overlay. AT&T/Cox also state that the number porting technology is available and should be used. AT&T/Cox July 8, 1997 Reply Brief, pp. 1 and 2.

However, in the event that area code relief is needed, AT&T/Cox recommends that the Department order the use of a geographic split and that existing wireless customers be grandfathered and permitted to retain their existing 10-digit numbers. AT&T/Cox state that the geographic split remains the remedy of choice for NPA exhaust problems because virtually all area code relief has occurred through the use of a geographic split, and that solution has been implemented successfully in every area of the country. AT&T/Cox also state that Connecticut consumers are familiar with a geographic split and will not be confused by it. According to AT&T/Cox, over the past several years, regulators in Alabama, Arizona, California, Florida, Georgia, Illinois, Massachusetts, Minnesota, Missouri, Oregon, Tennessee, Virginia, and Washington have all adopted geographic splits after reviewing all relief options and their potential impact on consumers, carriers, and competition. AT&T/Cox further claim that customer surveys generally indicate a preference for a geographic split versus an overlay, which is why it is the most widely accepted method of relief. In support of this statement, AT&T/Cox cite to the demonstrated results of SNET's customer survey conducted in Docket No. 94-11-21, which indicated a strong customer preference for a geographic split rather than an overlay. AT&T/Cox contend that overlays have not been accepted nationally.

In support of a geographic split, AT&T/Cox argue that they maintain the traditional one-to-one relationship between NPAs and specific geographic areas while in an area overlay situation, customers or businesses next door to each other or across the street from each other may end up with different area codes. In an overlay situation, customers may also be assigned two separate area codes within the same location when adding new telephone numbers. AT&T/Cox argue that as a result, an intensive public education program would be required for an overlay and that 10-digit dialing is necessary (in accordance Federal Communications Commission (FCC) rules and regulations) for calling all numbers in both the old and new overlay NPA code.

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<sup>5</sup> SNET disagrees with AT&T/Cox and NECTA. SNET states that porting of unassigned numbers would result in inferior service, create new administrative burdens related to cost and allocation, and may be rendered obsolete by the implementation of long-term number portability. SNET Reply Brief, pp. 2-5.

AT&T/Cox state that despite the fact that customers continue to prefer the easy geographic association provided by the geographic split alternative, with the advent of competition, incumbent telephone companies have been advocating the overlay method of relief. The reason for this is that the incumbent LECs enjoy the competitive advantage of holding the vast majority of NXXs in the pre-existing NPA, while competitors will be required to receive NXXs from the new unfamiliar overlay area code. AT&T/Cox claim that potential CLEC customers would be more reluctant to receive telephone services from the CLEC if they must acquire telephone numbers in the unfamiliar new overlay NPA, or may in some cases be forced to change telephone numbers if permanent number portability is not yet in place. AT&T/Cox contend that no overlay plan could begin to be competitively neutral until true LNP has been implemented pursuant to 47 U.S.C. § 251(b)(2). AT&T/Cox favor a geographic split because it preserves 7-digit dialing for local calls and is more competitively neutral. According to AT&T/Cox, when permanent number portability has been in place, along with the porting of unassigned numbers, the situation can and should be revisited.

Further, AT&T/Cox argue that the technological differences between a geographic split and an area overlay must also be considered. AT&T/Cox contend that the existing network and switching hardware and software, and supporting operations systems, have been designed to accommodate area code splits. In contrast however, extensive and costly reprogramming of telephone company systems is required to implement an overlay. According to AT&T/Cox, testimony in other states indicates that many commercial customer premises and PBX key systems may not work with an overlay without completely being replaced or unless extensive and costly modifications are made. Accordingly, AT&T/Cox conclude that a geographic split would be the least confusing, and most competitively neutral area code relief solution.

Relative to wireless services, AT&T/Cox claim that the impact of a geographic split on these services can be minimized by "grandfathering" existing wireless customers. Specifically, instead of changing wireless subscribers' NPAs in the new geographic area code, wireless end users would be permitted to retain their existing numbers to avoid the required reprogramming of wireless devices. AT&T/Cox state that would make it unnecessary to reprogram existing wireless equipment, and avoid any costs associated with such reprogramming. AT&T/Cox assert that grandfathering of Type 2 customers (i.e., wireless customers who are connected to the landline system via a tandem switch) has been ordered as part of geographic split solutions in California, Massachusetts, Missouri, and Texas, and was agreed to by industry consensus in Michigan. AT&T/Cox May 22, 1997 Comments, pp. 5-11; AT&T/Cox Reply Brief, pp. 2-6.

Regarding the survey, AT&T states that the survey evidence confirms the strong Connecticut consumer preference for a geographic split method of assigning new NPAs. AT&T claims that the survey revealed that both residential and business customers overwhelmingly preferred a geographic split to the overlay method. According to AT&T, 76% of the residential customers surveyed preferred a geographic split after hearing the initial description of the two methods, with only 18% preferring an overlay. AT&T states that after receiving additional information regarding the effects of

the two methods, residential customer support for a geographic split increased to 81% with only 13% of such customers preferring an overlay.<sup>6</sup> Additionally, business customers showed a strong preference for the geographic split. AT&T notes that after the initial description, 70% of business customers surveyed favored a geographic split, while only 27% preferred an overlay. AT&T further noted that after additional information was provided, the percentage of surveyed business customers favoring a geographic split increased to 78%, while the support for an overlay fell to only 18%.

AT&T asserts that the survey confirms the consumer preference for maintaining the geographic identity of area codes that was also demonstrated in the survey conducted by SNET in Docket No. 94-11-21, wherein both residential and business customers preferred a geographic split over an overlay. AT&T states that given the consistency of the two survey results, there can be no question that Connecticut consumers strongly prefer the geographic split method of assigning new area codes. Additionally, AT&T argues that the strength of the consumer preference for a geographic split is revealed by the fact that SNET, chose not to conduct and participate in the survey process. AT&T also argues that SNET's conscious choice not to conduct a survey reveals that it expected the geographic split preference that the survey in fact demonstrated. AT&T further argues that it is telling to note that Bell Atlantic Mobile (BAM) sought and was granted permission by the Department to present expert testimony in response to the survey evidence, but then chose not to submit any testimony. AT&T claims that it is appropriate to infer that BAM's expert reviewed the study methodology and the pollster's testimony and concluded that the methodology could not be effectively challenged. AT&T concludes that there is no basis in the record for questioning the survey methodology or results.

Additionally, AT&T contends that SNET's attempt to challenge certain survey instrument statements fails to provide any basis for rejecting the results of the survey. According to AT&T, the preference for a geographic split was strong even when only the initial descriptions were read to survey respondents. AT&T also contends that those initial descriptions were a fair explanation of the basic attributes of the two methods. AT&T maintains that the fact that existing customers would keep their current area code under an overlay was clearly explained, as was the fact that all customers in the new area code under a geographic split would have to deal with a change in their area code. Given this information, AT&T concludes that consumers preferred a geographic split.

Further, AT&T claims that consumer preference for retaining 7-digit dialing as much as possible is clear as opposed to having the certainty of dialing 11 digits for all calls under the overlay proposed by SNET. AT&T states that some customers will have a mixed local dialing pattern, with some calls within an extended local dialing area crossing area code borders requiring 11-, rather than 7-digits, does not provide a reason to abandon 7-digit dialing entirely; a necessary result of the overlay method. A geographic split would allow most consumers to continue dialing only 7-digits for their local calls. Accordingly, AT&T suggests that the Department review the drawing of

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<sup>6</sup> Late Filed Exhibit No. 11, Figure 2.

boundary lines between area codes so as to preserve as much 7-digit dialing as possible for as many people as possible.

AT&T also suggests that SNET's efforts to downplay the disadvantages of an overlay be rejected. In the opinion of AT&T, the overlay method creates the possibility that customers will have different area codes for different lines at the same premises. Noting a series of answers to Department staff interrogatories, AT&T claims that SNET attempted to downplay the likelihood of this happening. According to AT&T, SNET's solutions (i.e., changing all of an entity's numbers to the new overlay area code and reserving telephone numbers for growth for Centrex and PBX DID customers) are not likely to be available or appealing to the ordinary customer, while SNET's other option of assigning numbers in the existing area codes to such customers as long as they are available, is anticompetitive. AT&T also argues that SNET, unlike any other competitor, has access to hundreds of thousands of unused telephone numbers in the NXX codes it has assigned to itself in the 203 and 860 NPAs. AT&T offers the opinion that no other competitor will be able to offer this advantage to consumers. AT&T asserts that the very existence of an overlay area code is likely to stifle the development of local competition because only SNET will be able to offer to ameliorate the problem of having different area codes in a single premises. AT&T October 28, 1997 Brief, pp. 1-5.

Additionally, AT&T recommends that the Department follow consumer preferences in the new NPA planning process. AT&T claims that consumers want to maintain the geographic identity of area codes and seven digit dialing whenever possible and the Department should honor these preferences. AT&T states that the several public hearings confirmed the strong public support for a geographic split method of adding new area codes. Those hearings revealed no significant support for an overlay and nothing to suggest that the survey results showing a strong preference for a geographic split were either inaccurate or should be ignored. AT&T October 28, 1997 Brief, p. 6.

Separately, Cox Connecticut Telcom, LLC (Cox) argues that the survey results demonstrated that customers strongly favor a geographic split, including those who had previously experienced one. Cox maintains that this conclusion cannot be ignored or minimized or explained away as a result of cross-examination of the survey. Cox says that as the survey itself stated in its conclusion, 81% of residential respondents and 78% of business respondents preferred a geographic split over an overlay.

Cox does not approve of SNET's effort to discredit the survey because of a lack of pretesting. According to Cox, the survey administrator explained that it had done similar surveys in the States of Washington and California and had done pretesting in these states of the base questions and additional limited pretesting in Connecticut of the specific questions used in this survey. Cox maintains that the Connecticut pretesting confirmed the earlier results.

Cox also disagrees with SNET's implication that the business survey was somehow flawed because "only" 200 businesses were surveyed. Cox notes that expansion of the survey to the size SNET desired, would have added to the cost and

the time to conduct the survey; time which was not available due to the Department's schedule. Most importantly Cox argues, was the additional cost and time which would not have been a worthwhile investment in this instance.

Additionally, Cox argues that the survey demonstrates the importance of 7-digit dialing to both residents and businesses. Specifically, the survey demonstrated that 86% and 81% of respondents respectively agreed with the statement that it is important to keep 7-digit dialing for local calls whenever possible. According to Cox, it would be directly contrary to customer preference to eliminate 7-digit dialing because it is possible (albeit not required) within a geographic split, and impossible with an area overlay.

Lastly, Cox argues that the results of the public hearings conducted by the Department are consistent with the survey. Cox states that the comments of several of the speakers at the public hearing are illuminating. A preference for 7-digit dialing was expressed; the same overall response as the survey. Cox also states that 7-digit dialing is important to people and that concern over efficiency and customer confusion, by a mix of 7- and 10-digit dialing is misplaced. Cox notes that it is clear that as between an overlay and a geographic split, a geographic split is favored by those most affected consumers in Connecticut. Cox October 28, 1997 Brief, pp. 1-6.

#### **C. BELL ATLANTIC MOBILE (BAM)**

BAM states that the projected exhaust of available telephone numbers will be somewhat ameliorated with the implementation of number portability. BAM says that LECs are required to begin the phased deployment of a LNP in the 100 largest metropolitan statistical areas no later than October 1, 1997, and to complete deployment in those MSAs by December 31, 1998. BAM claims that deployment of number portability will serve to eliminate the need for CLECs to hoard telephone numbers, which may currently be occurring. BAM also claims that currently, many CLECs may be procuring telephone numbers in much larger quantities than necessary to satisfy existing customer requirements in order to ensure the availability of an adequate supply of telephone numbers within an NPA-NXX. According to BAM, by retaining an overabundance of telephone numbers, CLECs can ensure not only the availability of telephone numbers to satisfy customer requirements, but also the availability of blocks of numbers within an NPA-NXX range, as may be desired by certain subscribers.

BAM states that with the implementation of number portability, CLECs will no longer be required to inventory more numbers than may be necessary because customers will have the ability to retain existing telephone numbers when subscribing to service from the CLECs. Consequently, CLECs will not be required to inventory large amounts of telephone numbers, which may serve to delay the time of number exhaustion. BAM concludes that number portability coupled with expeditious implementation of number pooling of returned unused numbers may serve to avert short-term number exhaustion. BAM May 22, 1997 Comments, pp. 1 and 2; BAM Brief, pp. 5 and 6.

Regarding implementation of new area codes, BAM states that with a geographic split, all wireless phones would need to be returned to a wireless service center to be reprogrammed with the new NPAs by a technician. In the event the Department chooses to implement a geographic split, BAM requests that wireless phones that do not share an exchange with landline phones (NPA-NXX) be "grandfathered" to avoid imposing the reprogramming burden on wireless customers. BAM also notes that grandfathering of wireless numbers was recently ordered in both New Jersey and Massachusetts for this reason. BAM May 22, 1997 Comments, p. 3.

BAM also recommends that to the extent the Department concludes that it must implement a plan to address pending number exhaustion, an NPA overlay should be adopted. BAM comments that the benefits associated with the NPA overlay for wireless subscribers would mean the ability to avoid the personal time and cost associated with the need to have their wireless phones reprogrammed by a technician. BAM contends that implementation of a geographic split with no accommodation to wireless subscribers would require that wireless customers read bill inserts informing them of the need to reprogram their phones, contact the wireless service center to schedule an appointment, and await a convenient date and time. Moreover, implementation of an NPA overlay would allow Connecticut subscribers to avoid the significant expense associated with the need to change printed materials such as business cards and advertising materials.

Additionally, BAM argues that one of the principle benefits associated with a geographic split would be the ability of callers to retain 7-digit dialing for many local calls. However, the proliferation of telecommunications equipment and services requiring telephone numbers renders 7-digit dialing an objective that cannot be maintained in the future. According to BAM, even if a geographic split were implemented, a substantial number of subscribers would be required to dial 10-digits to reach at least some portion of their local calling area. As such, 10-digit dialing appears to be an imminent, if not foregone, conclusion for Connecticut. BAM also argues that the benefits associated with the NPA overlay when contrasted with the burdens associated with the geographic split become even more apparent.

Furthermore, BAM claims that when viewed objectively, Connecticut's relevant characteristics are remarkably similar to those of Maryland, which was recently required to confront the issue of number exhaustion, despite the fact that a second area code had been introduced in 1992, and had been projected to accommodate growth until 2012. BAM states that to date it is aware of no significant consumer opposition or problems associated with Maryland's area overlay implementation. BAM strongly suggests that despite Connecticut's recent tradition of being a leader with respect to the implementation of innovative telecommunications ideas, the Department should follow Maryland and implement an NPA overlay. BAM May 22, 1997 Comments, pp. 4 and 5; BAM Brief, p. 1, 4 and 5.

Relative to the industry survey, BAM argues that it was biased from the outset, with the ultimate conclusions of such being of little value or assistance to the



Department. While acknowledging that the instant survey was conducted following two earlier area code surveys in the states of Washington and California, BAM argues that since each of these surveys concluded with a customer preference for the implementation of a geographic split rather than an overlay, it is little wonder that survey administrator was retained by entities favoring the same result with respect to Connecticut. BAM notes that AT&T, while advocating the implementation of a geographic split in Connecticut, was also among the sponsors of the California survey.

Additionally, BAM argues that while the Connecticut Survey included a "pretest," no personal focus groups were conducted on the particular question set utilized in Connecticut. BAM questions the survey administrator's sharing the survey instrument with SNET prior to undertaking the survey, and SNET's concerns with the survey, yet it never reviewed SNET's concerns or the list of questions proposed by SNET to describe a geographic split. BAM contends that the questions submitted to survey participants reveal that it was predestined to result in a customer preference for a geographic split. For example, the survey provided respondents with a description of a geographic split which indicated the potential retention of 7-digit dialing for local calls, with 10-digit dialing for local calls when crossing area codes. Noting that the overlay option was described as requiring 10-digit dialing for local calls, with 1+ 10- or 11-digit dialing for toll calls, BAM asserts that survey respondents were not informed that even with a geographic split, 78% of users would be required to dial 11-digits even for certain local calls. BAM said that the fact that survey respondents were not apprised of this prospect is particularly damning to the survey's result given that respondents expressed a "strong desire to maintain 7-digit dialing wherever possible." BAM states that the survey administrator testified that she was unaware of this possibility, and conceded that had she known this information, certain questions would have been worded differently.

Further, BAM indicates that the survey did not ask respondents if their opinion would change if they knew that they would be among users required to change area codes. Nor did it inquire of respondents as to whether they understood that the available telephone numbers under a geographic split was finite and could require implementation of additional area code splits in the future. BAM argues that this phenomenon is not unique to Connecticut as the State of Maryland was recently required to confront the issue of number exhaustion despite the fact that a second area code had been introduced in 1992, and had been projected to accommodate growth until 2012. Nevertheless, BAM asserts that the Connecticut survey respondents were not advised that the implementation of an overlay would obviate the need for area code splits, and there was no question to gauge respondent sentiment in that regard.

Finally, BAM references survey question Q-15 contained in the Business portion of the survey. According to BAM, this question exemplifies the extent to which the survey administrator was uninformed as to the manner by which an overlay would be implemented in Connecticut. BAM states that question Q-15 appears to indicate that with an overlay, the area code would no longer relate to a unique location but could be located anywhere within an area. However, upon questioning during the August 7, 1997 hearing, the pollster conceded that she was unaware that overlay codes would be

specific to a geographic area. BAM concludes that it is not clear that respondents were aware of this fact, or would have changed their opinion upon learning that information. BAM October 28, 1997 Brief, pp. 1-5.

**D. MCI TELECOMMUNICATIONS CORPORATION (MCI)**

MCI urges the Department to adopt a geographic split to resolve the forecasted 1999 exhaust in the 203 and 860 NPAs. MCI claims that a geographic split plan is the most widely accepted method of NPA relief and that consumers have expressed a preference for area code splits as opposed to overlays because telephone numbers retain a regional identity with geographic splits. MCI contends that splits also avoid the unprecedented customer confusion inherent in the existence of multiple area codes in one business, neighborhood, or even an individual residence that result from implementation of overlays. MCI also contends that a geographic split is competitively neutral in that it would not stifle the emerging development of effective competition in the Connecticut local telecommunications market. MCI maintains that unlike geographic splits, an area overlay would not only cause undue customer confusion, but is also anti-competitive. Accordingly, MCI recommends that the Department not consider an overlay relief plan at this time and instead order SNET to begin implementation of a geographic split to resolve the impending NPA exhaust as soon as appropriate. MCI May 21, 1997 Comments, pp. 2 and 3.

Additionally, MCI argues that a traditional geographic split should be approved for the 860 and 203 area codes, consistent with tested historical industry approaches to numbering code relief. MCI supports a plan which would split the geographic region encompassed within each exhausting NPA into two area codes. According to MCI, this is the traditional method for the resolution of NPA number exhausts throughout the country. Under a geographic split, all calling patterns within each NPA would remain the same, (i.e., 7-digit dialing would be retained for local calls within each NPA, and 11-digit dialing would be required for inter-NPA calls). MCI cites as additional advantages of a geographic split the retention of existing calling patterns, customer familiarity with and preference for splits, and minimizing of customer confusion that may result from implementing an overlay. Further, SNET already has experience with split implementation resulting from its previous split of the 203 area code. MCI May 21, 1997 Comments, p. 4.

MCI also states that customers and the industry are accustomed to geographic splits. MCI claims that every state commission except one has favored the use of a geographic split instead of the overlay for NPA relief. A geographic split is also pro-consumer in that it is less confusing to consumers than an overlay. MCI posits that consumer preference for a geographic split may be attributed in part to the fact that under a geographic split, the historic expectations and customary dialing patterns of consumers are not disrupted. MCI says that consumers, have historically associated NPAs with defined geographic areas, leaving in place the one-to-one correlation between NPAs and geographic areas. In contrast however, area overlays sever the link between NPA and geographic boundaries. MCI maintains that for those consumers who reside in a geographic area that receives the new NPA, only the first three digits of

their telephone number will change while the remaining 7-digits would stay the same. MCI asserts that any confusion which may result from a consumer receiving the new NPA can be mitigated by use of a permissive dialing period whereby callers would be informed that the number dialed has changed NPAs. In contrast with an overlay plan, residential and business customers will be confronted with other more confusing anomalies such as having two different NPAs within the same premises. MCI May 21, 1997 Comments, pp. 4-6.

Additionally, MCI argues that unlike a geographic split, implementation of an overlay would allow SNET to "lock-in" an inequitable distribution of NXX codes in its favor. MCI states that SNET is able to "lock-in" these codes because there are no constraints preventing it from assigning CLECs NXX codes from the overlaid NPA only; or continuing to assign itself NXX codes from the existing 860 and 203 NPAs, thereby adding to its stockpile of NXX codes. MCI claims that the inevitable result is that CLECs will solely be affected by the inherently anticompetitive distortions associated with the overlay.

Furthermore, MCI contends that CLECs who are unable to offer consumers the option of maintaining their current NPA will encounter greater difficulty in persuading consumers to switch local service providers. According to MCI, consumers value their NPAs in that they perceive there are benefits to maintaining their current NPA. For example, residential consumers may find benefit in maintaining their current NPA because their friends and family are already familiar with it, while businesses may perceive intangible value of being identified by a particular NPA. MCI maintains that the perceived value of a particular NPA to consumers will affect their decision whether to change their local service provider. MCI concludes that it is possible that consumers' decision to switch providers may depend upon whether they can retain their current NPAs. MCI says that such a prospect is anti-competitive in that it would have a detrimental effect on the development of competition in the Connecticut market. MCI May 21, 1997 Comments, pp. 6 and 7.

Regarding the survey, MCI notes that the results demonstrate a clear preference for area code relief that minimizes customer confusion by retaining 7-digit dialing to the greatest possible extent for local calls, allows for geographic distinction for the area code and encourages the retention of existing calling patterns. MCI claims that respondents also favor a methodology that results in one area code per business or household. According to MCI, these are not the hallmarks of an overlay, which would provide none of these benefits.

MCI states that the survey respondents were not without criticism of the geographic split methodology because it would cause significant disruption and, in some cases, result in substantial expense to some consumers. MCI asserts that under any relief plan, certain customers will experience disruptive changes. However, when the advantages and disadvantages of a geographic split are weighed against those of an overlay, MCI claims that the scale tilts in favor of the traditional split methodology.

MCI contends that the survey results also serve to underscore the conclusions reached by this Department in Docket No. 94-11-21 and by state regulators in other jurisdictions that have established a new area code in recent years. MCI maintains that the traditional geographic split is the most widely accepted and adopted method of NPA relief and is the least competitively biased approach of the two methodologies. MCI also maintains that it would also best serve the interests of local exchange carriers in the competitive telecommunications environment envisioned by the Connecticut Legislature in Public Act 94-83, An Act to Implement the Recommendations to the Telecommunications Task Force. MCI October 28, 1997 Letter, pp. 1-4.

**E. NEW ENGLAND CABLE TELEVISION ASSOCIATION (NECTA)**

NECTA recommends that the Department assure adequate and competitively neutral numbering resources in Connecticut by implementing a system to increase numbering efficiency and delay exhaust through the porting of unassigned numbers to CLECs; waiting for 4- to 6-months before issuing a final order on area code relief in order to monitor the status of NXX assignments and to assess the success of number porting efforts; and if area code relief is required, implementing geographic splits of the 860 and 203 NPAs rather than an area overlay. NECTA June 26, 1997 Brief, p. 2.

NECTA also supports proposals for conserving numbering resources in the 860 and 203 area codes, the reduction in the number of rate centers, and the implementation of the porting of unassigned numbers as a means of delaying NXX exhaust in the 860 and 203 area codes. According to NECTA, the potential benefits to competition through availability of numbers across Connecticut and to consumers through possible avoidance of the need for area code relief outweigh the likely costs associated with a number porting effort.

Regarding number porting, NECTA claims that it would remedy the inefficiencies in the current distribution of numbering resources in Connecticut. NECTA posits that SNET controls the vast majority of the assigned NXX codes in the 860 and 203 NPAs and therefore, most, if not all, of the 86 rate centers in the state. NECTA states that given SNET's average fill rate per NXX, it should have many thousands of unused telephone numbers in every town in Connecticut and that this surplus may increase if competitors succeed in taking away SNET local exchange customers. NECTA concludes that CLECs should not be denied access to this surplus and avoid the need for each CLEC to maintain the wasteful practice of securing an NXX code for each rate center it intends to serve. NECTA June 26, 1997 Brief, pp. 5-7.

NECTA asserts that the record of this proceeding demonstrates that the Department can wait from 4-to 6-months to gain a better sense of whether area code relief will be needed. NECTA recommends that the Department establish procedures and processes for porting unused numbers; require SNET to provide monthly updates on the status of NXX code usage and projected exhaust dates; and schedule further hearing(s) in the fourth quarter of 1997 or early 1998 to review the status of number porting efforts and evaluate SNET's updated exhaust projections. According to NECTA, this approach may save Connecticut consumers from an unnecessary bout

with area code relief and afford the Department, LECs and consumers ample time to implement a relief plan should it prove necessary.

While noting SNET's request at the May 1, 1997 technical session for a Department decision rested on three explicit or implicit assumptions, (i.e., that at projected rates, the 860 and 203 NPAs will exhaust during 1999; the Department and the LECs will require 18-months to implement a relief plan; and the Department will not implement measures to slow NXX code usage, such as the porting of unassigned numbers), NECTA says that none of these assumptions may come to pass. For example, the Department has the power to alter two of SNET's assumptions (i.e., adopt NECTA's number conservation recommendations or shorten the period required to implement relief from 18-months to 12- to 14-months). NECTA maintains that as long as the Department orders SNET to begin customer education efforts coincident with the start of the technical changes, Connecticut consumers will have at least a full year to plan for changes required by any area code relief method. Finally, NECTA notes that SNET's NXX usage projections may be overstated, particularly if the Department requires the parties to implement porting of unused numbers in a reasonable basis and SNET successfully implements service provider number portability in the Hartford and New Haven metropolitan areas as scheduled during 1998.

Moreover, NECTA maintains that a delay in the Department's Decision of four to six months has numerous advantages and no disadvantages. For example, a four to six month delay would enable the Department and the parties the ability to confirm with real data the results of number conservation efforts and the levels of NXX demand on a month-to-month basis. NECTA states that if CLEC demand for NXX codes is lower than expected or conservation methods successfully result in more efficient use of existing NXX codes, implementation of area code relief can be delayed or avoided. In the alternative, NECTA argues that if the monthly usage figures reveal actual code usage at a level significantly higher than projected, the Department can schedule hearings and issue a relief plan order to achieve implementation prior to exhaust. Therefore, for all of these reasons, NECTA recommends that the Department defer its decision until it determines whether implementation of a relief plan truly is necessary. NECTA June 26, 1997 Brief, pp. 7-10.

Additionally, NECTA contends that geographic splits are the simplest, most consumer friendly and most competitively neutral form of area code relief for the 860 and 203 NPAs. NECTA also states that the Department should follow the lead of every commission in the country except Maryland and adopt a geographic split rather than an area overlay approach. NECTA says that the Department should retain the convenience of 7-digit dialing for local telephone calls and reject a geographic split with 10-digit local intra-NPA calling. NECTA claims that if the geographic split is accomplished, it is doubtful that Connecticut will ever need another area code proceeding. NECTA June 26, Brief, pp. 10 and 11.

NECTA claims that from a consumer standpoint, geographic splits have many advantages over the alternative overlay approach. According to NECTA, Connecticut consumers should be well acquainted with geographic splits and the changes entailed

by them from the recent 203/860 split and geographic splits in the neighboring states. NECTA maintains that this should relieve public anxiety over number changes. NECTA contends that the geographic splits permit retention of 7-digit dialing for local calls within an area code providing benefits to residential and community-oriented business customers. NECTA states that given these factors it is understandable that SNET's customer survey in Docket No. 94-11-21, and surveys taken in other states demonstrated a preference for splits over overlays. NECTA June 26 Brief, pp. 11-14.

NECTA also asserts that geographic splits are competitively neutral in that they provide neutral access to numbering resources for carriers operating within a given area of Connecticut. NECTA maintains that implementation of a split ensures that each carrier seeking to compete with SNET for local exchange customers will have access to an abundant supply of telephone numbers with a given area code. This will allow competition among carriers to occur based solely on price, service quality and value rather than on the fortuity of whether a particular carrier possesses or lacks numbers within a desirable NPA. NECTA says that it would not be a fair and level competitive playing field if incumbents are the principal beneficiaries of customer reluctance to change to a new and untried area code.

Additionally, NECTA claims that many state commissions have ruled in favor of geographic splits in part based on the uneven playing field between incumbents possessing a near inexhaustible supply of telephone numbers and new entrants who often lack access to such numbers, particularly as exhaustion nears. NECTA states that in the case of area overlays, marketing problems occur in which CLECs must acquire new numbers in the new overlay NPA or, alternatively, overcome customer concerns over loss of desirable features under interim number portability technologies. NECTA concludes that these factors further support a decision to implement geographic splits in Connecticut. NECTA June 26, 1997 Brief, pp. 14 and 15.

Regarding overlays, NECTA says that they may impede or harm CLEC efforts to compete in the local exchange telephone markets. NECTA asserts that these concerns are real and therefore, support implementation of geographic splits. NECTA also asserts that overlays are not implemented against a backdrop of a level playing field, but rather in an environment where LEC and cellular incumbents have ubiquitous control of NXX codes throughout their service territories and many CLECs are only beginning to acquire such codes. NECTA argues that in light of their ample supplies of historical numbers, continually resupplied by churn, the incumbents will need few, if any, NXX codes in the new area codes. NECTA also argues that in contrast, all CLECs will likely be required to rely on the less desirable new codes to some extent, or, alternatively, be forced to pay a competition tax in the form of number portability payments to SNET.

Moreover, NECTA argues that a lack of numbers in the existing codes will impede efforts to furnish additional lines to residential or business customers already served by SNET, a business opportunity that many CLECs may use as part of their local exchange entry strategy. NECTA states that customers are likely to react favorably to CLEC proposals to supply additional lines where the results would be to

have different area codes in the same home or business. NECTA June 26, 1997 Brief, pp. 15-17.

Additionally, NECTA asserts that an overlay may cause accelerated exhaust of the 860 and 203 NPAs in Connecticut. According to NECTA, the ample supply of numbers in the 860 and 203 area codes provides CLECs with little or no incentive to obtain NXX codes in these NPAs in advance of the start of marketing efforts in Connecticut. NECTA contends that the same incentive holds if the Department orders implementation of a competitively neutral geographic split on a schedule that will provide relief before the exhaust date. NECTA states that in both of these instances, CLECs will have reasonable assurances they can acquire NXX codes when needed, without fear of competitive disadvantage from other providers.

NECTA claims however, that these assumptions may not hold true if the Department orders implementation of an overlay because CLECs will realize that if they do not obtain NXX codes in each rate center in the historical NPAs prior to exhaust, they may lose the opportunity to acquire such numbers, particularly, if the Department declines to order the porting of unused or unassigned 860 and 203 numbers. NECTA says that if this the case, CLECs will be at a competitive disadvantage for the indefinite future as compared to SNET and any CLECs that happen to possess the desirable 860 and 203 area codes. According to NECTA, rational CLECs may accelerate requests for NXX codes in the historical NPAs in areas in which they plan to provide service, triggering a premature exhaust that will harm consumers and other CLECs. NECTA June 26, 1997 Brief, pp. 17 and 18.

NECTA also argues that overlays would be confusing and require extensive customer education efforts that SNET has not committed to provide. NECTA notes that in contrast to the geographic split approach, few telephone customers in Connecticut will have any knowledge or understanding of overlays or the mandatory change to minimum 10-digit dialing that must accompany implementation of overlays. NECTA also notes that customers may not know why some carriers will offer numbers in the historical 203/860 area code while others may be limited to the new 475/959 codes; customers may also be unfamiliar with interim and number portability options that likely will be offered by CLEC carriers; and they may not be accustomed to calling numbers that are assigned different area codes that are located in the same county, block, street, house or business, or facing the need to refer to a directory to determine the correct 10 digit number for local calls. Lastly, NECTA notes that business customers may not understand that mandatory 10- or 11-digit dialing may require installation of significant additional memory capacity to PBX and other customer premises equipment or necessitate replacement of outdated equipment.

NECTA argues that providing business and residential customers with basic information on overlays and associated implementation issues will require an extensive customer/public education effort of a kind and scale different from a geographic split. NECTA states that SNET's unwillingness to conduct the large scale education effort required for an overlay is grounds for rejection of its proposal. NECTA claims that SNET has failed to address all the public education burdens that would accompany its

proposal to implement a new and untried approach to area code relief. NECTA contends that this is unfair to Connecticut consumers and invites an aggressive response from consumers, businesses and legislators to challenge a Department decision in favor of an overlay. For these reasons, NECTA recommends that the Department reject the SNET proposal for an area code overlay because it would be unduly confusing to consumers and harmful to competitors. NECTA June 26, 1997 Brief, pp. 18-20.

Additionally, NECTA claims that overlays are untried and may be difficult to implement in a timely fashion. NECTA states that overlays require fundamentally different changes to a telephone network than a traditional geographic split. According to NECTA, the most important change is that none of the many OSS systems that run LEC telephone networks is capable of implementing overlays. Consequently, the software that governs SNET's network has to be rewritten, reinstalled and comprehensively tested prior to implementation. NECTA says that completing this undertaking is likely to be a difficult job, particularly in light of the other system and switch change that will occur over the next two years.

NECTA contends that SNET has implicitly recognized the difficulty and uncertainty in implementing an overlay by estimating a 6- to 9-month range for network/translation work. NECTA asserts that SNET has not done the necessary back up work to quantify in detail the extent and difficulty of such work. NECTA also asserts that the Department, SNET's competitors and Connecticut consumers need reasonable assurance that SNET can make the system changes and test them comprehensively in a timely fashion. NECTA notes that SNET's failure to investigate these issues in a serious fashion does not provide this assurance. Noting that AT&T/Cox witness Collins' testimony, NECTA argues that these changes are likely to be significantly more complicated and expensive than SNET has projected, calling into question SNET's ability to meet any commitment to complete the system changes by any given date.

NECTA also claims that this has serious consequences for SNET's competitors and the public. According to NECTA, a key advantage of a geographic split is that work schedules can be accelerated if necessary to relieve an unexpected numbering crisis. NECTA states that application of more person hours to the necessary switch work, whether by SNET employees or outside technicians will shorten the implementation period. NECTA further claims that development of new software applications often runs beyond deadlines and that additional problems may become apparent during the implementation process. NECTA maintains that these uncertainties create an unacceptable risk of another serious number shortage in Connecticut and that this risk could be avoided if the Department were to order a geographic split. NECTA June 26, 1997 Brief, pp. 20-23.

Relative to the survey, NECTA asserts the results strongly support the use of geographic splits as the best method for providing relief to the 860 and 203 NPAs. According to NECTA, the overwhelming support for the geographic split method versus the proposed overlay alternative in the survey provides strong and unrefuted evidence



that from a consumer standpoint, geographic splits are the best method for providing numbering relief in Connecticut.

NECTA also contends that the survey was conducted in accordance with sound statistical and methodological practices and that the best evidence of the analytical soundness of the survey, is BAM's withdrawal of its request to sponsor a witness to provide testimony challenging the results. NECTA says that BAM and SNET's failure to produce a contrary expert witness and failure to attempt to conduct their own consumer surveys constitute tacit admissions that the survey results accurately report that Connecticut residential and business consumers strongly support geographic splits rather than the little-used and little-liked overlay alternative. Therefore, NECTA recommends to the Department that it should adopt the position taken by the majority of Connecticut residents and businesses and implement geographic splits with seven digit intra-NPA local calling. NECTA October 27, 1997 Brief, pp. 1-5.

Lastly, NECTA states that public comment provided during hearings following the administration of the survey confirm the results that Connecticut consumers do not support the overlay approach to area code relief. NECTA argues that few members of the general public attended the hearings and offered positions regarding the issue of whether to provide number relief through a geographic split or through an area overlay. NECTA claims that the results of the public hearing process are fully consistent with the instant survey results and those provided in Docket No. 94-11-21. NECTA also claims that the record of this proceeding is clear that residential and business consumers strongly prefer the geographic split method over the alternative overlay method for providing area code relief. NECTA says that if Connecticut consumers are unhappy with geographic splits and they are well-informed about the potential difficulties associated with this particular form of relief through direct experience with the just-completed 203/860 split in favor of an area overlay alternative, such views would have evident in the survey and/or the public hearing process. NECTA suggests the Department take note of the lack of support for the overlay plan in deciding the best method of relieving the 860 and 203 NPAs and implement the geographic split method of area code relief. NECTA October 27, 1997 Brief, pp. 5-7.

#### **F. SOUTHERN NEW ENGLAND TELEPHONE COMPANY (SNET)**

SNET claims that the state faces a potential exhaust of NXX codes within the near future. SNET contends that based on service provider survey results combined with the results of rate center consolidation, it projects that the 860 NPA will exhaust by February 1999 and the 203 NPA by June 1999.<sup>7</sup>

SNET also contends that when the 860 area code implementation was finalized in October 1996, virtually all of the 792 NXXs available under the 203 area code had

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<sup>7</sup> SNET updated the potential 860 and 203 exhaust dates. In particular, SNET now projects the exhaust date for the 203 NPA to be October 1999. Additionally, during Oral Argument, SNET again updated the forecasted 860 and 203 NPA exhaust dates to May 1999 and March 2000, respectively. SNET Response to TE-7; Tr. 1/6/98, p. 979.

been placed into use.<sup>8</sup> SNET also contends that when the new area code became effective, the existing 203 NXXs were divided between the 860 and 203 area codes. SNET states that in the 860 area code, 61 NXXs were assigned in the final three months of 1996. SNET also states that survey results ordered by the Department suggest that 161 NXXs would be assigned in 1997, leaving only 159 NXXs entering 1998. Similarly, SNET maintains that in the 203 area code, 52 NXXs were assigned in the last three months of 1996. SNET asserts that survey projections suggest that 156 NXXs will be assigned during 1997, leaving only 135 NXXs going into 1998.

SNET also asserts that while there is an element of uncertainty in the above projections, that unlike the past, when NXX consumption was linked to growth, NXX consumption is now caused largely by competition. SNET argues that because each CLEC will require a unique NXX in each rate center it wishes to serve, NXX utilization is dependent upon how many CLECs enter the marketplace, and how fast new market entrants wish to cover the state. SNET says that based on the NXX code requirements forecasted by service providers coupled with the actual number of NXX assignments made to date in 1997, it believes Connecticut must fully prepare for the near term exhaustion of NXX codes in both the 203 and 860 area codes.

SNET claims that it has already undertaken measures to delay the exhaust of Connecticut's 860 and 203 area codes. For example SNET has consolidated its toll rate centers from 115 to 86. Because NXXs are assigned per rate center, this reduction will reduce the rate at which available NXX codes are depleted. Specifically, the rate center consolidation extended the projected exhaust dates in the 203 area code from February to June 1999 and in the 860 area code from May 1998 to February 1999. SNET June 26, 1997 Brief, pp. 4-6.

SNET disagrees with AT&T/Cox Telecom and NECTA's recommendation to port unassigned numbers as a near term solution to number exhaust using interim number portability (INP) to port unassigned numbers.<sup>9</sup> SNET claims that the record makes it clear that porting of unassigned numbers is not a viable near-term solution to number exhaust because porting of unassigned numbers would result in inferior service, create new administrative burdens related to cost and allocation, and may be rendered obsolete by the implementation of LNP. For example, customers receiving a ported number may receive a reduced level of service, (i.e., Caller ID and other vertical features requiring Signaling System 7 services) would be lost for ported numbers. Additionally, other customer inconvenience and confusion may result because RCF

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<sup>8</sup> According to SNET, not all NXX codes may actually be assigned for use (e.g., N-1-1 codes, special billing codes, weather, lottery and feature group B codes and plant test codes). SNET notes that accounting for these special codes, there were 394 NXXs available for assignment in the 860 area code, and 343 NXXs within the 203 area code as of October 4, 1996.

<sup>9</sup> According to SNET, INP while providing a temporary method of number porting, may be wasteful of telephone numbers and an inefficient use of telephone numbering resources. SNET states that with INP, a dialed number is remote call forwarded (RCF) to a second number on the new service provider's switch, thereby requiring two numbers for each number ported. INP also requires the switch donating numbers to remain in the call path for all calls involving numbers for the entire duration of such calls. SNET Reply Brief, p.2.

requires the use of two numbers, only one of which the customer knows. SNET cites as an example a customer calling E911 who will give the dispatch officer a different phone number than one appearing on the attendants screen, possibly adding to the confusion in a potentially emergency situation.

SNET also disagrees with AT&T/Cox and NECTA's claim that the RCF plan can be implemented by SNET alone. SNET argues that INP will require the creation of a new industry task force to address allocation, cost, and capacity issues. SNET contends that the porting of unassigned numbers has not been implemented in any jurisdiction using INP and that participation of all carriers would be critical since at the time of projected NXX exhaust, CLECs are expected to have reserved for their use, 500 NXX codes within the existing 860 and 203 area codes. SNET says that many NXXs assigned to CLECs are likely to be in rate centers where competition is heaviest, and the subject of greatest demand. According to SNET, an interim solution that requires creation of a new task force, along with the resolution of technical issues, is not likely to result in a timely or efficient solution.

SNET does agree however, that permanent porting of unassigned numbers will play a part in mitigating number exhaust problems. SNET maintains that resources are better devoted to implementing true LNP and number pooling, rather than an interim solution that may provide inferior service. SNET recommends that rather than devoting Connecticut-only resources to provide a temporary and flawed solution, that industry-wide resources be directed to implementing permanent number pooling. SNET Reply Brief, pp. 2-5.

Regarding deployment of new area codes, SNET outlined during this proceeding, two alternatives to address area code exhaust issues, an NPA overlay and a geographic split. SNET believes that an NPA overlay is better suited to address Connecticut's NXX exhaust than a geographic split for the following reasons.

First, SNET believes that an overlay would disrupt fewer customers than a geographic split because under a geographic split, half of all customers (wireless and wireline) would be required to change their existing phone numbers. SNET says that for those in the 860 area code, the change would be the second change since October 1996. New telephone numbers would also require changes to stationery, business cards, advertising materials, and other printed matter. In contrast, with an area overlay, all customers would be able to keep their existing telephone numbers. SNET June 26, 1997 Brief, p. 7.

Additionally, SNET argues that an overlay provides a better utilization of NXXs than a geographic split. In order to maximize the benefit of a geographic split, SNET maintains that geographic boundaries must be imposed so that NXX codes are utilized equally between the two new areas. SNET claims that this is an unrealistic goal given the need to make splits follow boundaries understandable by consumers. SNET contends that if the area cannot be divided equally, the exhaust dates would be unequal with one area possibly exhausting sooner than the other. In contrast, an NPA overlay provides maximum utilization of NXXs created by the additional area code

without any regard to boundary lines or the timing of additional number exhaust. SNET June 26, 1997 Brief, p. 8; SNET Reply Brief, pp. 9-11.

SNET also argues that a geographic split in the 860 area code is likely to lead to customer confusion because boundaries cannot be drawn to coincide with any readily associated group of counties or municipal boundaries. SNET says that although the 203 area code may possibly be divided between Fairfield and New Haven counties, no such county division can be drawn within the 860 area code. SNET notes as an example that all of Hartford and Litchfield counties could not be included in one area code because the NXXs in the new area would far outnumber those in the remaining areas, and thereby defeat a purpose of splitting the NPAs. SNET suggests that a likely split would have one area code encompassing opposite ends of the state (including, the New London and Cornwall areas), while the other area code would include Hartford and some of the surrounding towns. According to SNET, in-state and out-of-state callers could be confused by such a division. SNET June 26, 1997 Brief, p. 9.

Additionally, SNET maintains that 7-digit dialing for local calls would no longer be universally retained and may be undesirable if a geographic split is adopted. SNET claims that because a split shrinks each area code's geographic territory, many local calls would be placed between area codes and would no longer be accomplished by 7-digit dialing. SNET maintains that if a geographic split were adopted, two dialing options are available: (1) 7-digit local within the NPA; (2) 10-digit for all local and 1+ 10-digit for toll.<sup>10</sup> If a geographic split is implemented, SNET recommends that 10-digit dialing be required in order to maintain the differentiation between local and toll calls. SNET June 26, 1997 Brief, p. 10.

SNET notes that if the Department wishes to implement a "belt and suspenders" approach, a geographic split would not be appropriate. SNET says that there is some consensus within the industry that number pooling if accomplished, would resolve a number of NXX utilization issues. SNET argues however, that it is far from clear that number pooling could be available before Connecticut's current NXXs are exhausted. SNET asserts that a "belt and suspenders" approach would require it to prepare to implement one of the area code options, with the ability to avoid actual implementation if technological advances are able to resolve NXX utilization issues. SNET states that if the Department were to adopt this approach, an overlay would have less customer impact than a geographic split. SNET also states that because the main customer impact of an overlay is the prospective conversion from 7-digit to 10-digit local dialing, existing customers would experience minimal impact during an interim period. In contrast, with a geographic split, there can be no "belt and suspenders" approach because customers assigned to each of the two new area codes will have to begin making changes to their stationery, advertisements, etc., during the permissive period. SNET contends that even if a geographic split were deemed unnecessary at the last

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<sup>10</sup> SNET maintains that if the first option is adopted and 7-digit dialing is partially retained, a customer will not be able to differentiate whether a cross-boundary call is a local or toll call based on the dialing pattern. In the event 10-digit dialing is adopted, the customer would maintain the ability to differentiate between local and toll calls, (i.e., local calls are always 10-digits while toll will always be 1+ 10-digits).

moment, customers would have already incurred the necessary expenditures to change their area code. SNET June 26, 1997 Brief, p. 11; SNET Reply Brief, pp. 11 and 12.

SNET also claims that an area overlay will cost significantly less than a geographic split. According to SNET, a geographic split is estimated to cost \$7M more than an overlay. While noting that a large portion of this amount is due to the expenses related to reprogramming the cellular telephones of wireless customers, SNET claims that these are costs that will in some way be passed on to wireless consumers. SNET June 26, 1997 Brief, p. 12.

Lastly, SNET argues that an overlay is competitively neutral. SNET contends that CLECs will have close to 500 NXXs in Connecticut's existing area codes at the time of exhaust. SNET also contends that the FCC mandates that 10-digit local dialing in conjunction with NPA overlays to eliminate disparate dialing between incumbent and new entrants' services. Additionally, SNET contends that the implementation of long term number portability will further enhance the competitive environment in Connecticut. Accordingly, in light of the above, SNET requests that the Department order the adoption of an NPA overlay each existing area code to address the exhaust of NXXs. SNET June 26, 1997 Brief, p. 13; SNET Reply Brief, pp. 6-9.

Regarding the survey, SNET argues that it induces a preference for a geographic split when it begins by providing respondents with only two of the three possible options for the introduction of the two new area codes. SNET claims that the overlay method is presented in a negative light through misinformation and lack of information, while the geographic split option is presented in a favorable manner, including the provision of additional information. While noting that it has provided a full description and comparison of the three dialing options, SNET states that it reiterated these three options to Cox in its comments on the proposed customer survey, and recommended that they be included in the customer survey and presented to survey respondents in random order. SNET contends that the survey, presented, albeit inaccurately, only two options for area code relief: (1) the geographic split option requiring 7-digit dialing for local calls within an area code and 10-digit or 11-digit dialing for toll calls within an area code, and (2) an overlay option whereby all telephone calls would require 10-digit or 11-digit dialing. SNET argues that the survey failed to include the third option presented in this proceeding, the geographic split option that would require 10-digit dialing for all local calls and 11-digit dialing for all toll calls. SNET notes that during cross examination, the pollster admitted that she was not aware of a third option and if she were, it would have been included in the survey.

SNET also claims that inaccuracies and misleading statements occur throughout the survey document. SNET cites as an example, the description of an overlay informing respondents that "[t]he new area code no longer relates to a unique location, but could be anywhere in the area." SNET maintains that this statement is inaccurate and misleading and implies an unfavorable aspect unique to an overlay when, it is just as accurate for a geographic split. When this statement was brought to the survey administrator's attention, she admitted that she was unaware at the time the survey was drafted. SNET argues that this description is further misleading in that it fails to inform

respondents of one of the primary benefits of an overlay, that it maintains the same geographic boundaries as the existing area codes, and eliminates the need to draw new boundary lines, unlike a geographic split that changes existing boundary lines and redefines the geographic areas to be served by each area code. SNET contends that a geographic split in the 860 area code is likely to lead to customer confusion because boundaries cannot be drawn to coincide with any readily associated group of counties or municipal boundaries.

Additionally, SNET maintains that the survey description of an area overlay informed respondents that all residences and businesses would "keep their current area code unless they moved," and all new business and residence lines would be assigned the new area code. SNET contends that this statement implies that with an overlay, a move would require a new area code, again placing a negative connotation on an overlay. SNET claims that this statement, is absent from the description of a geographic split even though it applies equally to a geographic split. According to SNET, this discrepancy is especially misleading when contrasted with the description provided for a geographic split, which informs respondents that "businesses and households in the new area code keep their current seven digit telephone number, but have a new area code."

SNET states that the impact of this variation in descriptions is so misleading as to slant the survey in favor of a geographic split. Another example is that the overlay description does not disclose that customers will retain their current area code and telephone number, while the geographic split description fails to disclose that customers in the new area codes may retain their telephone number. SNET argues that a change of area code is a change of telephone number and that throughout this proceeding, references to a "telephone number change" have been synonymous with a change in telephone number resulting from a change in the area code portion of the telephone number.

Additionally, SNET contends that the survey's overlay description informs respondents that all calls will be made by dialing either ten or eleven digits, while the geographic split description informs respondents that they will retain 7-digit dialing for local calls and will be required to dial 10- or 11- digits for toll calls. SNET contends that in reality, a geographic split will require 78% of Connecticut customers to suffer a mixed dialing pattern of 7-digit and 11-digit dialing for local calls. According to SNET, in light of the weight that 7-digit dialing for local calls carries, this misinformation, prior to respondents answering any survey questions, so heavily tips the balance in favor of a geographic split that it is inconceivable that later information could remove this bias.

Moreover, SNET maintains that the survey concludes its description of a geographic split by informing survey respondents that a geographic split will not affect long-distance charges. SNET notes that while this information is equally true to an overlay application, it is omitted, and is only provided if the survey respondent specifically asks about the effect an overlay will have on long distance charges.

SNET also argues that the survey failed to inform respondents that the proposed geographic split will create four new distinct areas with boundaries that are not as easily recognizable in the current two area split. SNET states that the boundaries proposed in this proceeding were drawn so that NXX codes are utilized as equally as possible to prevent early exhaustion in any one of the four areas. SNET also states that the 203 area code has been split so that Fairfield County will be assigned one area code and New Haven County will receive another area code, while the 860 area could not be divided as simply as the 203 area. According to SNET, the 860 area code would be divided so that the City of Hartford and a number of surrounding towns will be assigned an area code, leaving the balance of the now 860 area to be assigned an area code of its own. SNET claims that the survey never informed respondents of this information, nor were respondents provided with a visual depiction of the four-area split of the State. According to SNET, omission of this crucial information is a significant deficiency in the survey.

SNET concludes that the discrepancies in descriptions provided to respondents prior to answering any questions, along with gross errors and omissions of information, produce a bias for the geographic split, up front, that renders all responses tainted. SNET October 27, 1997 Brief, pp. 4-10.

Additionally, SNET argues that the survey misleads respondents by providing respondents with "choices" that contain inaccurate information, thereby misleading respondents to conclude that 7-digit dialing can be maintained in Connecticut. SNET contends that these choices are not based on the factual situation in Connecticut, nor do they provide survey respondents with the actual impact of another geographic split; in particular, the mixed-dialing pattern that will affect an overwhelming majority of Connecticut's telephone customers. SNET states that the first statement implies that customers will be able to complete all local calls with 7-digit dialing when, in fact, under the proposed split, the overwhelming majority of Connecticut customers would be required to dial 11- digits to reach at least some portion of their local calling area. SNET argues that while 7-digit local dialing will remain possible within an area code, 11-digit dialing will be required for local calls between area codes, and all toll calls will require 11-digit dialing. SNET asserts that if Connecticut is split into four area codes, a mixed-dialing pattern for local calls will be imposed on 78% of customers, which will create confusion. SNET concludes that the information contained in these two "choices" is clearly erroneous, and leads respondents to choose the geographic split on the basis that 7-digit dialing will be maintained. SNET October 27, 1997 Brief, pp. 10 and 11.

Furthermore, SNET argues that the survey minimizes the disruptions and costs that would occur if a second geographic split is implemented. SNET notes that when describing the geographic split, the survey only provides information crucial to an informed response "if needed." SNET states that if it is determined that additional information should be provided, the information is presented in a fashion that does not inform respondents of the true disruptions and costs of a geographic split. SNET cites as an example, the survey informing respondents, that some cellular phones or pagers would have to be reprogrammed and that some businesses and households will have

to change their stationery, business cards etc., because they will have a new area code. SNET asserts that "some" is a gross understatement and that the survey fails to inform respondents that approximately 50% of all cellular phones and pagers will require reprogramming if a geographic split is implemented, and that approximately 50% of all businesses and households will be required to change their telephone numbers. SNET also asserts that the survey also fails to disclose that this 50% of all businesses and households will bear the economic burden of the costs to reprint stationery, business cards, trucks, advertising, etc., and that half of these customers will be affected for the second time in less than three years. SNET notes that the pollster has justified these omissions based on a need to keep the definitions of a geographic split and an overlay clear and succinct and not to confuse respondents with a reprogramming issue that would not impact a hundred percent of the people.

SNET maintains that although advance notice of a split will permit these customers to reduce some of the expense of new stationery and business cards, etc., commercial vehicles with advertising, marketing brochures, etc. will require customers to incur expenses that cannot be avoided and for some, will require incurring these expenses for the second time since October 1996. SNET states that these businesses and households also must somehow disseminate their new telephone number to family, friends, and current and potential customers. Lastly, SNET states that existing businesses forced into a new area code will bear the expense and hardships necessitated by changing their numbers, while competing enterprises in the same line of business unaffected by a geographic split will totally avoid such consequences.

In contrast, SNET argues that the survey fails to convey that the stationery, businesses cards, advertising, etc. of current customers will be unaffected if an overlay is implemented. SNET says that new business and residential customers will also be unaffected since they generally do not invest monies into stationery, business cards, advertising, etc. until they are informed of their new telephone number. According to SNET, the geographic split advocates have seriously underestimated the disruptions and costs that would occur with a change in telephone number, especially when Connecticut customers have already undergone the hardships and expenses of an area code split fewer than three years ago. SNET posits that forcing telephone customers to incur the costs and hardships of a second geographic split is unjustifiable, particularly in light of the fact that 78% of Connecticut's telephone customers will not retain 7-digit dialing for all local calls, but will be required to utilize a mixed-dialing pattern to complete local calls. Additionally, SNET says that the survey downplays these significant financial burdens, inconveniences, and competitive impacts, by providing this information to respondents only "if needed," and by grossly understating the true impact of a geographic split. SNET claims that the result of which is to influence the results in favor of a geographic split. SNET October 27, 1997 Brief, pp. 12-14.

Finally, SNET argues that the survey inaccurately implies that an overlay will require heavy reliance on directory assistance and telephone directories to obtain new telephone numbers. SNET contends that with an overlay, new business and new residential telephone numbers will receive the new area code. SNET concurs with OCC in that customers will need to use directory assistance or a telephone directory to



obtain a new telephone number regardless of whether a geographic split or an overlay is implemented. SNET maintains that the survey fails to bring to the attention of respondents is that with a geographic split, many familiar telephone numbers will change. SNET states that the change in familiar telephone numbers that would result if a geographic split is implemented is more likely to require customers to utilize directory assistance and telephone directories. In contrast SNET notes that with an overlay, customers will know that existing phone numbers remain unchanged. SNET October 27, 1997 Brief, pp. 14 and 15.

**G. SPRINGWICH CELLULAR LIMITED PARTNERSHIP (SPRINGWICH)**

Springwich argues that while there are no easy answers to the question of area code relief, the record in this proceeding clearly supports adoption of the overlay approach to resolving the forecasted exhaustion of NXX codes within the 203 and 860 area codes. Springwich asserts that the overlay method will be the least burdensome to consumers and is clearly the most far sighted method available. Accordingly, Springwich urges the Department to continue to proceed expeditiously and that it issue a decision in favor of an overlay solution in order to afford Connecticut telephone users the maximum lead time in which to become familiar with, and to make any necessary hardware or software modifications to support the new area codes. Springwich June 26, 1997 Brief, p. 1.

Springwich posits that one important factor for the Department to review and evaluate in determining the appropriate remedy is the experience of Connecticut consumers during the recent area code split. While noting that all telephone users in Connecticut were required to become familiar with and adopt new dialing patterns when calling state residents and businesses located outside of their area code, Springwich claims that residential and business customers located in the new 860 area code were even more significantly inconvenienced by having to advise all of their families, friends and business associates of their new area code, and by having to reprint personal and business stationery and business cards. Springwich maintains that cellular telephone service subscribers also experienced these inconveniences and efforts.

Additionally, Springwich notes that nearly a quarter of a million cellular subscribers in the affected 860 area code were also burdened by having to physically re-program their cellular telephones with the new telephone number. Springwich claims that in the vast majority of cases, this effort entailed having to bring each cellular telephone to an authorized service center to be reprogrammed and tested. Springwich also claims that the education and re-programming effort was costly, averaging approximately \$50 per subscriber, which added to the overall cost of offering services to consumers. Based on the wireless industry's growth since the last area code split, and the anticipated growth over the next few years, Springwich estimates that roughly twice as many cellular users would be affected if the state were to undergo additional area code splits in the time frame projected in this proceeding.

Springwich maintains that avoiding a second round of these burdens and inconveniences to Connecticut consumers is an important criterion for the Department